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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LU, JIPING	

ART UNIT	PAPER NUMBER
3749	

MAIL DATE	DELIVERY MODE
10/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,455	BOETTCHER ET AL.	
	Examiner	Art Unit	
	Jiping Lu	3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 6-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 6-10 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4/20/06.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 6-10 are rejected 35 U.S.C. 103(a) as being unpatentable over Freze (U.S. Pat. 4,268,247) in view of Schregenberger (U. S. Pat. 4,326,342).

Freze shows a method and an apparatus for drying laundry comprising a drying chamber 14, a process air circuit 14, 16, 20, 26, 14 including a fresh air supply passageway 39 and exhaust air discharge passageway 38, a heater 36 disposed in the process air circuit, a blower 18 disposed in the process air circuit and configured to convey drying air through the drying chamber 14, a flow dividing device 30, 31 disposed in the process air circuit and configured to controllably divide a flow of the drying air into an exhaust air 38 and a recirculation air

component 70, 26 which are arranged in the same manner as broadly claimed. The flow dividing device includes a shut off damper 31 configured to completely or partially close an air path of the recirculated air component. However, Freze does not show a pressure sensor and a program control module for controlling the shut-off damper based on measured pressure profile of the drying chamber. Schregenberger teaches a concept of using a pressure sensor measuring the pressure in a gas stream 13 where the gas enters the chamber 8 and controlling the shut-off damper 26 by a program control module 25 to completely or partially close the gas path of the recirculated gas based on the measured pressure (col. 4, lines 5-17). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the laundry drying method and apparatus of Freze to include a pressure sensor and a program control module for controlling the damper based on the measured pressure as taught by Schregenberger in order to promote air flow efficiency. With regard to claim 7, the heater power will be inherently reduced and affected by variation of incoming fresh make up air 84 or outgoing hot exhaust air 38 or speed of blowers 40, 18. With regard to the claimed location of the pressure sensor, it would have been an obvious matter of design choice to locate the pressure sensor at any desired location in order to obtain the optimum and predictable result since applicant has not disclosed that the claimed sensor location solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art and it appears that the claimed feature does not distinguish the invention over similar features in the prior art since, the laundry drying apparatus and method of Freze as modified by Schregenberger will perform the invention as claimed by the applicant with the pressure sensor having any kind of the location.

4. Claims 6-10 are rejected 35 U.S.C. 103(a) as being unpatentable over Haried (U.S. Pat. 4,549,362) in view of Schregenberger (U. S. Pat. 4,326,342).

Haried shows a method and an apparatus for drying laundry comprising a program control module50, a drying chamber 10, a process air circuit 10, 12, 22, 38, 10 including a fresh air supply passageway 32 and exhaust air discharge passageway 30, a heater 40 disposed in the process air circuit, a blower 14 disposed in the process air circuit and configured to convey drying air through the drying chamber 10, a flow dividing device 37 disposed in the process air circuit and configured to controllably divide a flow of the drying air into an exhaust air 30 and a recirculation air component 38 which are arranged in the same manner as broadly claimed. The flow dividing device includes a shut off damper 37 configured to completely or partially close an air path 38 of the recirculated air component. However, Haried does not show a pressure sensor and a program control module for controlling the shut-off damper based on measured pressure profile of the drying chamber. Schregenberger teaches a concept of using a pressure sensor measuring the pressure in a gas stream 13 where the gas enters the chamber 8 and controlling the shut-off damper 26 by a program control module 25 to completely or partially close the gas path of the recirculated gas based on the measured pressure (col. 4, lines 5-17). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the laundry drying method and apparatus of Haried to include a pressure sensor and a program control module for controlling the damper based on the measured pressure as taught by Schregenberger in order to promote air flow efficiency. With regard to claim 7, the heater power will be inherently reduced and affected by variation of incoming fresh make up air 84 or outgoing hot exhaust air 38 or speed of blowers 40, 18. With regard to the

claimed location of the pressure sensor, it would have been an obvious matter of design choice to locate the pressure sensor at any desired location in order to obtain the optimum and predictable result since applicant has not disclosed that the claimed sensor location solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art and it appears that the claimed feature does not distinguish the invention over similar features in the prior art since, the laundry drying apparatus and method of Haried as modified by Schregenberger will perform the invention as claimed by the applicant with the pressure sensor having any kind of the location.

5. Claims 6-10 are rejected 35 U.S.C. 103(a) as being unpatentable over Heissmeeier (DE 2220425) in view of Schregenberger (U. S. Pat. 4,326,342).

Heissmeeier shows a method and an apparatus for drying laundry comprising a drying chamber 7, a process air circuit 7,5,8,7 including a fresh air supply passageway (not numbered, see Figure) and exhaust air discharge passageway 11, a heater 2 disposed in the process air circuit, a blower 3 disposed in the process air circuit and configured to convey drying air through the drying chamber 7, a flow dividing device (not numbered, see figure) disposed in the process air circuit and configured to controllably divide a flow of the drying air into an exhaust air 11 and a recirculation air component which are arranged in the same manner as broadly claimed. The flow dividing device includes a shut off damper (see figure) configured to completely or partially close an air path 11 of the recirculated air component. However, Heissmeeier does not show a pressure sensor and a program control module for controlling the shut-off damper based on measured pressure profile of the drying chamber. Schregenberger teaches a concept of using a pressure sensor measuring the pressure in a gas stream 13 where the gas enters the chamber 8

and controlling the shut-off damper 26 by a program control module 25 to completely or partially close the gas path of the recirdulated gas based on the measured pressure (col. 4, lines 5-17). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the laundry drying method and apparatus of Heissmeeier to include a pressure sensor and a program control module for controlling the damper based on the measured pressure as taught by Schregenberger in order to promote air flow efficiency. With regard to claim 7, the heater power will be inherently reduced and affected by variation of incoming fresh make up air 84 or outgoing hot exhaust air 38 or speed of blowers 40, 18. With regard to the claimed location of the pressure sensor, it would have been an obvious matter of design choice to locate the pressure sensor at any desired location in order to obtain the optimum and predictable result since applicant has not disclosed that the claimed sensor location solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art and it appears that the claimed feature does not distinguish the invention over similar features in the prior art since, the laundry drying apparatus and method of Heissmeeier as modified by Schregenberger will perform the invention as claimed by the applicant with the pressure sensor having any kind of the location.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shewmon (U. S. Pat. 2,676,418), Flynn (U. S. Pat. 4,133,636) all show a clothes drier with recirculated air circuit.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEVEN B. MCALLISTER can be reached on 571 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jiping Lu
Primary Examiner
Art Unit 3749

J. L.